

REMARKS

Claims 1-21 are pending. By this Amendment, Claims 1, 4-7, 9-11 and 14-21 are amended.

In the Office Action, the Examiner rejects Claims 1-21 under 35 U.S.C. § 103(a) as being unpatentable over Lin et al. (United States Pre-Grant Publication No. 2002/0133619, hereinafter “Lin”) in view of Bremer et al. (U.S. Patent No. 6,553,002, hereinafter “Bremer”).

This rejection is respectfully traversed.

Lin discloses searching a rules table using a binary search, to find a rule that matches a particular combination of data and filter mask. In particular, Lin discloses that a mask from a mask table is multiplied with a data value, and the resulting product is sequentially compared with rules from a rules table until a matching rule is found or available rules are exhausted, whichever comes first. Thereafter a next mask is selected to provide a new product, and the process is repeated. Figure 12 shows an exemplary circuit for performing this comparison process (see also numbered paragraphs [0143]), and Figure 14 shows a flow diagram illustrating the process (see also numbered paragraphs [0148] – [0150]). If a rule does not match the product, then a next rule is selected based on the comparison and using a binary search. See, for example, Figure 11 and numbered paragraph [0140], which generally describe binary searching, and numbered paragraph [0143], which describes Lin’s comparison process and mentions binary searching. See in particular the second half of paragraph [0143] beginning with “*Mux 312 is configured to receive the control signal of ‘>’, ...*”.

Thus, Lin matches a particular rule with a particular product of data and mask. Lin discloses that the pointers table can specify a range of rules to be compared with a particular product. See, e.g., numbered paragraphs [0142], [0149]. At most only one rule within the range will be matched to a given mask and data combination or product. See, e.g., numbered paragraph [0150].

However, Lin does not disclose or suggest a rule that applies to a *range* of key values, and fails to disclose or suggest searching a plurality of objects defining key ranges to identify an

